

STATEMENT OF BASIS

The Goodyear Tire & Rubber Company

Gadsden, Alabama

Etowah County

Facility No. 307-0006

Introduction

This proposed renewal Title V Major Source Operating Permit is issued under the provisions of ADEM Admin. Code r. 335-3-16. The above-referenced applicant has applied to renew the existing Title V Permit, which was originally issued on December 20, 2006. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents submitted on June 27, 2016, attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit. This permit would not allow the emission of additional air pollutants.

The Goodyear Tire and Rubber Company was issued its existing Major Source Operating Permit (MSOP) on January 17, 2012, with an expiration date of December 31, 2016. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to the Department no later than June 30, 2016. A complete application was received on June 27, 2016.

The Goodyear Tire & Rubber Company owns and operates a rubber tire manufacturing facility in Gadsden, Alabama. The facility produces a variety of original equipment (OEM) and replacement radial passenger tires and radial light truck tires (RLT).

The following are significant sources of air pollution for this facility:

- Raw Materials Receiving and Handling
- Rubber Mixing
- Tire Stock Preparation
- Tire Building and Curing
- Final Finishing
- Miscellaneous Solvent Use
- Emergency Engines

NOTES

The facility currently holds the following air permits which will be included in the MSOP:

Permit No.	Description	Date Issued
307-0006-X026	Force Grinding Operations (FG-22 and FG-23) controlled by baghouse FGDC-6 ¹	June 26, 2012
307-0006-X027	Radial Run Out Grinding Operations (RROG-8, RROG-9, and RROG-10) controlled by Torit Dust Collectors RROGDC-1 and RROGDC-2 ²	June 26, 2012
307-0006-X028	White Sidewall (WSW) Grinder #11 serviced by one (1) Farr Twin Cyclone Process Barron Cyclone (RROGDC-1) serving existing Radial Runout Grinders	August 26, 2014

¹FGDC-6 was not constructed.

²RROG-9 and RROG-10 were not constructed.

Raw Materials Receiving and Handling

Description

This category consists of the following processes and operations:

- Pigment Blending (EP 33-1235) with Baghouse (CD 33-1235)

Goodyear no longer blends its own pigments due to the ineffectiveness of the process. Pigment blending is currently outsourced through another company. This process will remain in the permit to give Goodyear the flexibility to operate if necessary.

- Manual Pre-Weigh (EP 33-1140) with Baghouse (CD 33-1140)

Goodyear currently purchases its preweigh raw material from a vendor. This process will remain in the permit to give Goodyear the flexibility to operate if necessary.

- Storage Tanks

This facility has the following seventeen storage tanks:

Tank ID	Tank Capacity (gallons)	Material Stored
ST-1	10,000	Process Oil
ST-2	10,000	Process Oil
ST-3	10,000	Process Oil
ST-4	10,000	Process Oil
ST-5	10,000	Process Oil
ST-6	10,000	Process Oil
ST-7	10,000	Process Oil
ST-8	10,000	Process Oil
ST-9	10,000	Process Oil
ST-10	10,000	Process Oil
ST-11	10,000	Process Oil
ST-12	10,000	Process Oil
ST-13	10,400	Process Oil
ST-14	10,400	Process Oil
ST-15	10,400	Recycled Oil
ST-16	10,400	Recycled Oil
ST-17	10,400	Process Oil

Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “Major Source Operating Permits”.

- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.
- The storage tanks are not subject to ADEM Admin. Code r. 335-3-6-.03, “*Loading and Storage of VOC*”. They do not have a true vapor pressure greater than or equal to 1.5 psia.
- The storage tanks are not subject to the applicable requirements of 40 CFR 60 Subpart Kb, “*Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*”. Per §60.110b(a), this subpart applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL). All of these tanks have capacities of 10,000 gallons (37.9 m³) or 10,400 gallons (39.4 m³), which are well below the 19,813 gallon (75 m³) cut off.
- Per 40 CFR §60.540, these units are not considered affected sources subject to the applicable provisions of 40 CFR 60 Subpart BBB, “*Standards of Performance for the Rubber Tire Manufacturing Industry*”.
- Per 40 CFR §63.5982(b)(4), these units are not considered affected sources subject to the applicable provisions of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing*”.

Emissions Standards

Opacity:

- Visible emissions (VE) shall not exceed twenty percent (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty percent (40%) opacity.

(ADEM Admin. Code r. 335-3-4-.01(1)(a)(b))

Particulate Matter (PM):

- PM emissions shall not exceed the value determined by the following equation for a Class I County:

$$E = 3.59P^{0.62} \quad \text{or} \quad E = 17.31P^{0.16}$$

(for $P < 30$ TPH) (for $P \geq 30$ TPH)

where: E = emissions in lb/hr
 P = process weight in TPH

(ADEM Admin. Code r. 335-3-4-.04(1))

Expected Emissions

Emissions for these sources were based on engineering estimates.

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions		Controlled Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
33-1235	PM	3.17	13.90	16.35	71.60	0.16	0.72
33-1140	PM	1.21	5.28	3.44	15.08	0.03	0.15
ST 1-17	VOC	N/A	N/A	0.20	0.86		

Compliance and Performance Test Methods and Procedures

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.
- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25 of 40 CFR 60, Appendix A.
- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 of 40 CFR 60, Appendix A.

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

Particulate Matter (PM) and Opacity:

- An observation of instantaneous visible emissions from each baghouse associated with these units shall be accomplished weekly while in operation by an individual certified to determine opacity.
- If the observed instantaneous opacity from any unit is greater than ten (10%) percent, a series of fifteen (15) second visible emissions observation shall be conducted within **thirty (30) minutes** of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.
- If the six (6) minute average opacity during any Method 9 visible emission observation exceeds ten (10%) percent, corrective action shall be initiated within **two (2) hours**.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- Uncontrolled potential PM emissions from these sources do not exceed 100 TPY. Therefore, CAM is not required.

Volatile Organic Compounds (VOC):

- Due to the low levels of expected VOC emissions, periodic monitoring of VOC is not necessary. There is no emissions limit or control device for VOC, so CAM is not required.

Recordkeeping and Reporting Requirements

- Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report form. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through June 30th</i>	<i>August 29th</i>
<i>July 1st through December 31st</i>	<i>March 1st</i>

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

- The semi-annual monitoring report shall include the following information:
 - Calendar dates covered in the reporting period;
 - A detailed description of every instance in which visible emissions greater than ten (10%) percent were observed, to include the date, time, cause of the visible emissions, and the corrective action taken.
 - A copy of every ADEM visible emissions observation report generated during the reporting period.
 - A statement of certification of truth, accuracy, and completeness as described in ADEM Admin. Code r. 335-3-16.04(9);
 - Signature of the responsible official as required by ADEM Admin. Code r. 335-3-16.04(9).

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

Rubber Mixing

Description

The facility includes eleven (11) Banbury Mixers with associated Dust Collectors. These mixers combine raw materials such as carbon black, process oils, pigments, natural and synthetic rubber, and organo-silane coupling agents to form tire rubber. Some of the rubber is produced using specially formulated rubber (SFR) compounds, which produces ethanol emissions that would not otherwise occur during processing.

This process consists of the following emission points. All of the mixers have associated dust collectors, and some have an additional pellet feed dust collector and/or a pellet receiver dust collector.

Emission Point	Reference No.
Banbury Mixer 0 Dust Collector	33-1238
Banbury 0 Pellet Feed Dust Collector	33-N/N BB00
Banbury 2 Dust Collector	33-1237
Banbury 2 Pellet Receiver Dust Collector	33-1333
Banbury 2 Pellet Feed Dust Collector	2C-EF-5C BB02PF
Banbury 3 Dust Collector	33-1239
Banbury 3 Pellet Feed Dust Collector	33-0562
Banbury 4 Dust Collector	33-N/N BB04DC
Banbury 4 Pellet Feed Dust Collector	33-N/N BB04DS
Banbury 6 Dust Collector	33-1242
Banbury 6 Pellet Receiver Dust Collector	33-0796
Banbury 6 Pellet Feed Dust Collector	#6 Pellet
Banbury 7 Dust Collector	33-1243
Banbury 7 Pellet Feed Dust Collector	33-1116
Banbury 7 Pellet Receiver Dust Collector	33-N/N BB07
Banbury 8 Dust Collector	33-1244
Banbury 8 Pellet Feed Dust Collector	33-0391
Banbury 10 Dust Collector	33-1162
Banbury 10 Pellet Feed Dust Collector	33-N/N BB11
Banbury 11 Dust Collector	33-1230
Banbury 11 Pellet Feed Dust Collector	33-N/N BB11
Banbury 12 Dust Collector	33-1164
Banbury 27 Dust Collector	33-1141
Banbury 27 Pellet Receiver Dust Collector	33-N/N BB27

Banbury Mixers #5 and #9 have been removed from the facility since the last permit renewal in 2011.

Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “*Major Source Operating Permits*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), “*Control of Particulate Emissions for Process Industries - General*”.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), “*Control of Particulate Emissions – Visible Emissions*”.
- These units have enforceable BACT limits in place in order to comply with the applicable provisions of ADEM Admin. Code r. 335-3-14-.04. “*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]*”.
- Per 40 CFR §60.540, these units are not subject to the applicable provisions of 40 CFR 60 Subpart BBB, “*Standards of Performance for the Rubber Tire Manufacturing Industry*”. Rubber mixing is not listed as an affected source under this subpart.
- Per 40 CFR §63.5982(b)(4), these units are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing*”. However, this section states that there are no emission limitations or other requirements for rubber processing affected sources such as mixers.
- Per 40 CFR §63.6013, these units are subject to the applicable provisions of 40 CFR 63 Subpart A, “*General Provisions*” as listed in Table 17 of 40 CFR 63 Subpart XXXX.

Emissions Standards

Opacity:

- Visible emissions (VE) shall not exceed twenty percent (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty percent (40%) opacity.

(ADEM Admin. Code r. 335-3-4-.01(1)(a)(b))

Particulate Matter (PM):

- Combined PM emissions from the Banbury 27 Dust Collector (33-1141) and Banbury 27 Pellet Receiver Dust Collector (33-N/N BB27) shall not exceed 3.3 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- Combined PM emissions from the Banbury 6 Dust Collector (33-1242), Banbury 6 Pellet Receiver Dust Collector (33-0796), and Banbury 6 Pellet Feed Dust Collector (#6 Pellet) shall not exceed 3.42 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- PM emissions shall not exceed the value determined by the following equation for a Class I County:

$$E = 3.59P^{0.62} \quad \text{or} \quad E = 17.31P^{0.16}$$

(for $P < 30$ TPH) (for $P \geq 30$ TPH)

where: E = emissions in lb/hr
P = process weight in TPH

(ADEM Admin. Code r. 335-3-4-.04(1))

Volatile Organic Compounds (VOC):

- Banbury Mixer No. 27 shall not be used to process specially formulated rubber (SFR).

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- Total VOC emissions from the processing of SFR in the mixing operation shall not exceed 5.82 pounds of VOC per ton of SFR on a per batch basis (lb/ton/batch).

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- Total VOC emissions from the processing of SFR in the mixing operation shall not exceed 10.8 tons of VOC per month (tons/month).

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- Total VOC emissions from Banbury Mixers No. 0, 2, 4, 6, 7, 8, 10, 11, and 12 shall not exceed 17.50 lb/hr of VOC per Banbury Mixer on a per batch basis.

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- Total VOC emissions from Banbury Mixer No. 3 shall not exceed 20.10 lb/hr of VOC on a per batch basis.

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- No more than 10,700 tons of non-productive SFR may be processed in the Banbury Mixers per month.

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

- No more than 54,873 tons of productive SFR may be processed in the Banbury Mixers per month.

(ADEM Admin. Code r. 335-3-14-.04(9)(b)) BACT

Hazardous Air Pollutants (HAP):

- There are no HAP emission standards for these units under 40 CFR 63 XXXX.

Expected Emissions

Emissions estimates are based on Rubber Manufacturer Association (RMA) emissions factors and engineering estimates.

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions		Controlled Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
33-1238	PM	9.04	39.60	10.09	44.19	0.44	1.93
33-N/N BB00	PM	9.04	39.60	1.54	6.75	0.02	0.09
33-1237	PM	10.33	45.25	14.42	63.16	1.51	6.61
2C-EF-5C BB02PF	PM	10.33	45.25	1.91	8.37	0.02	0.09
33-1333	PM	10.33	45.25	0.96	4.20	0.02	0.09
33-1239	PM	14.11	61.80	20.68	90.58	0.90	3.94
33-0562	PM	14.11	61.80	3.16	13.84	0.02	0.09
33-N/N BB04DC	PM	10.33	45.25	12.51	54.79	0.55	2.41
33-N/N BB04PF	PM	10.33	45.25	1.91	8.37	0.02	0.09
33-1242*	PM	3.42	14.98	16.42	71.92	1.72	7.53
#6 Pellet*	PM	3.42	14.98	2.18	9.55	0.02	0.09
33-0796*	PM	3.42	14.98	1.09	4.77	0.02	0.09
33-1243	PM	10.33	45.25	14.42	63.16	1.51	6.61
33-1116	PM	10.33	45.25	1.91	8.37	0.02	0.09
33-N/N BB07	PM	10.33	45.25	0.96	4.20	0.02	0.09
33-1244	PM	11.33	49.63	14.52	63.60	1.51	6.61
33-0391	PM	11.33	49.63	2.22	9.72	0.02	0.09
33-1162	PM	14.11	61.80	20.68	90.58	0.90	3.94
33-N/N BB10PF	PM	14.11	61.80	3.16	13.84	0.02	0.09
33-1230	PM	14.11	61.80	20.68	90.58	0.90	3.94
33-N/N BB11PF	PM	14.11	61.80	3.16	13.84	0.02	0.09
33-1164	PM	8.10	35.48	6.88	30.14	0.07	0.31
33-1141	PM	3.30*	14.45	22.67	99.29	1.83	8.02
33-N/N BB27	PM	3.30*	14.45	1.62	7.10	0.02	0.09
Mixers (SFR)	VOC	10.80 TPM	129.6	29.59	129.60		
Mixers (non- SFR)	VOC			32.28	141.39		
Mixers	HAP			20.93	91.69		

*Combined limit

Compliance and Performance Test Methods and Procedures

- If testing is required, particulate matter (PM) emission shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.
- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25 of 40 CFR 60, Appendix A.
- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 of 40 CFR 60, Appendix A.
- When calculating monthly VOC emissions from SFR processing in the mixing operation, VOC emissions resulting from the productive mixing of SFR initially mixed at other facilities shall be included.

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- Compliance with the VOC and HAP limits shall be based upon materials use and inventory records.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- An observation of instantaneous visible emissions from each baghouse associated with these units shall be accomplished weekly while in operation by an individual certified to determine opacity.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- If the observed instantaneous opacity from any unit is greater than ten (10%) percent, a series of fifteen (15) second visible emissions observation shall be conducted within **thirty (30) minutes** of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- If the six (6) minute average opacity during any Method 9 visible emission observation exceeds ten (10%) percent, corrective action shall be initiated within **two (2) hours**.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- The pre-control potential emissions for each unit do not exceed 100 TPY. Therefore, CAM is not applicable.

Recordkeeping and Reporting Requirements

- Records summarizing the monthly SFR usage for both productive and non-productive SFR (in tons) shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records summarizing the SFR per batch and monthly VOC emissions shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Monthly SFR usage and VOC emissions records shall be compiled no later than the tenth (10th) day of the month following each monthly reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report form. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- A semi-annual monitoring report shall be submitted to the Department according the following schedule:

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

Reporting Period	Due Date
<i>January 1st through June 30th</i>	<i>August 29th</i>
<i>July 1st through December 31st</i>	<i>March 1st</i>

- The semi-annual monitoring report shall include the following information:
 - Calendar dates covered in the reporting period;
 - Amount of non-productive SFR processed each month;
 - Summary of ethanol VOC emissions from the processing of SFR on a per batch basis;
 - Total monthly ethanol VOC emissions associated with the mixing of SFR;
 - A detailed description of every instance in which six (6) minute average visible emissions greater than ten (10%) percent were observed, to include the date, time, cause of the visible emissions, and the corrective action taken.
 - A copy of every ADEM visible emissions observation form generated during the reporting period.
 - A statement of certification of truth, accuracy, and completeness as described in General Permit Proviso No. 9;
 - Signature of the responsible official as required by General Permit Proviso No. 9.

(ADEM Admin. Code r. 335-3-16-.05(c))

Tire Stock Preparation

Description

The facility contains the following units for tire stock preparation.

- 6 x 8 Chafer/Sidewall Line
- 12 x 6 Tread Line
- Quad Extruder (Tread)
- Quad Extruder (Combination)
- No. 6 Sidewall/Chafer Line
- Z-Calender
- Tread End Cementing Operation
- Tread Marking Operation

Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, *“Major Source Operating Permits”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), *“Control of Particulate Emissions for Process Industries - General”*.
- The tread end cementing portions of these units are subject to ADEM Admin. Code r. 335-3-6-.17, *“Manufacture of Pneumatic Rubber Tires”*. As stated in 335-3-6-.17(2)(a), (b), and (c), this rule applies to VOC emissions from undertread cementing, tread-end cementing, and green tire spraying.
- The 12 x 6 Tread Line have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04. *“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”*.
- Per 40 CFR §60.540, tread end cementing portions of these units are subject to the applicable provisions of 40 CFR 60 Subpart BBB, *“Standards of Performance for the Rubber Tire Manufacturing Industry”*.
- Per 40 CFR §63.5982(b)(1), the tire marking and tread end cementing portions of these units are subject to the applicable requirements of 40 CFR 63 Subpart XXXX, *“National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing”*.
- Per 40 CFR §63.6013, the tire marking and tread end cementing portions of these units are subject to the applicable provisions of 40 CFR 63 Subpart A, *“General Provisions”* as listed in Table 17 of 40 CFR 63 Subpart XXXX.

Emissions Standards

Particulate Matter (PM):

- Particulate emissions from these units shall not exceed the level determined by the following equation for a Class I County:

$$E = 3.59P^{0.62} \quad \text{or} \quad E = 17.31P^{0.16}$$

(for $P < 30$ TPH) (for $P \geq 30$ TPH)

Where: E = emissions in lb/hr
P = process weight in TPH

(ADEM Admin. Code r. 335-3-4-.04(1))

Volatile Organic Compounds (VOC):

- VOC emissions from the tread end cementing portion of each unit shall not exceed 10 grams (0.022 lb) of VOC per tire cemented for each month.

(40 CFR 60 Subpart BBB, §60.542(a)(3))

- Total VOC emissions from tread end cementing, undertread cementing, and green tire spraying shall not exceed an average of 76 grams per green tire, as determined on a monthly basis. Since these units already have a maximum permitted limit of 10 grams of VOC per tire tread, required by 40 CFR 60 Subpart BBB, this stipulation is satisfied.

(ADEM Admin. Code r. 335-3-6-.17(3)(d))

- Combined VOC emissions from the 12x6 Tread Line and Plummer Green Tire Sprayers No. 1 and 2 shall not exceed 39.0 tons in any consecutive twelve (12) month period.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- Combined VOC emissions from the Quad Extruder (Tread) and Quad Extruder (Combination) shall not exceed 13.20 tons in any consecutive 12-month period. Compliance with the annual VOC limit shall be determined by the following equation:

$$VOC\ Emissions = Amount\ Used\ \left(\frac{gal}{year}\right) \times Cementing\ Density\ \left(\frac{lb\ VOC}{gal}\right) \times \frac{ton}{2000\ lbs}$$

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

Hazardous Air Pollutants (HAP):

- Goodyear has chosen the HAP constituent option to comply with emissions limits for tire production affected sources. Emissions of HAP listed in Table 16 to Subpart XXXX of Part 63 shall not exceed 1,000 grams of HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source. Non-listed HAP emissions shall not exceed 10,000 grams of HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.

(§63.5985(a), 40 CFR 63 Subpart XXXX, Table 1)

Expected Emissions

Emissions estimates are based on RMA emissions factors.

Unit	Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions	
			(lb/hr)	(TPY)	(lb/hr)	(TPY)
6x8 Chafer/Sidewall Line	CP-12	PM	4.56	19.97	0.0004	0.002
		VOC			1.05	4.60
	CP-14	PM	4.56	19.97	0.0004	0.002
		VOC			1.05	4.60
12x6 Tread Line	EF 1N/200	PM	10.18	44.59	0.0001	0.001
		VOC			4.70	20.59
	EF-1	PM	10.2	44.6	0.0001	0.001
		VOC			4.70	20.59
Quad Extruder (Tread)	X022	PM	4.56	19.97	0.000298	0.00131
		VOC		13.20*	0.47	2.07
Quad Extruder (Combination)	X022	PM	4.56	19.97	0.62	2.7
		VOC		13.20*	0.17	0.7256
#6 Sidewall/Chafer Line	3B-EF-D5	PM	4.53	19.84	0.0000	0.001
		VOC			0.52	2.28
Z-Calender	CP-5	PM	10.38	45.46	0.0000	0.0000
		VOC			6.31	27.64
	EF-1H-300	PM	10.38	45.46	0.0000	0.0000
		VOC			6.31	27.64
	EF-5	PM	10.38	45.46	0.0000	0.0000
		VOC			6.31	27.64
12x6 Tread Line (Tread Cementing)	EF-1H-301	VOC		39.0	8.90	39.00
Quad Extruder (Tread Cementing)	EF-Internal	VOC		13.20	3.01	13.20
12x6 Tread Line (Tread Marking)	1H/1	VOC			0.73	3.21

*Combined limit

Emission Point	Pollutant	Allowable Emissions	Uncontrolled Emissions	
		(g/Mg)	(lb/hr)	(TPY)
CP-12	Listed HAP	1,000	0.31	1.35
	Non-Listed HAP	10,000		
CP-14	Listed HAP	1,000	0.31	1.35
	Non-Listed HAP	10,000		
EF 1N/200	Listed HAP	1,000	2.57	11.25
	Non-Listed HAP	10,000		
EF-1	Listed HAP	1,000	2.57	11.25
	Non-Listed HAP	10,000		
X022	Listed HAP	1,000	1.37	5.98
	Non-Listed HAP	10,000		
3B-EF-D5	Listed HAP	1,000	0.15	0.67
	Non-Listed HAP	10,000		
CP-5	Listed HAP	1,000	1.39	6.08
	Non-Listed HAP	10,000		
EF-1H-300	Listed HAP	1,000	1.39	6.08
	Non-Listed HAP	10,000		
EF-5	Listed HAP	1,000	1.39	6.08
	Non-Listed HAP	10,000		
EF-1H-301	Listed HAP	1,000	0.00	0.00
	Non-Listed HAP	10,000		
EF-Internal	Listed HAP	1,000	0.00	0.00
	Non-Listed HAP	10,000		
1H/1	Listed HAP	1,000	0.00	0.00
	Non-Listed HAP	10,000		

Compliance and Performance Test Methods and Procedures

- If water based cements containing less than 1.0 percent VOC (by weight) are used in the tread end cementing operation, formulation data or the results of Method 24 analyses shall be submitted to the Department annually, provided that the formula has not changed during the previous twelve (12) months.

(§60.543(b)(4), 40 CFR 60 Subpart BBB)

- If water based cements containing 1.0 percent VOC (by weight) or more are used in the tread end cementing operation, then the procedure outlined in §60.543(d) shall be used to determine compliance with the VOC emission limit per tire.

(§60.543(d), 40 CFR 60 Subpart BBB)

- The VOC content of cements shall be determined by Method 24 of 40 CFR 60 Appendix A or by formulation data.

(§60.547(a)(1), 40 CFR 60 Subpart BBB)

- If testing is required, VOC emissions shall be determined in accordance with Method 25 of 40 CFR 60 Appendix A.

(§60.547(a)(2), 40 CFR 60 Subpart BBB)

- Method 311 of 40 CFR 63 Appendix A, supplier data sheets, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(a), 40 CFR 63 Subpart XXXX)

- In order to demonstrate compliance with the applicable emission limits for tire production affected sources using the compliance alternative described in § 63.5985(a), purchase alternative, Method 311 of 40 CFR 63 Appendix A, supplier data sheets, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(b)(1), 40 CFR 63 Subpart XXXX)

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- Due to the low levels of expected PM emissions compared to the allowable limits, periodic monitoring of PM is not necessary.
- Compliance with the VOC and HAP limits shall be based upon materials use and inventory records.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- There are no control devices for these units for PM, VOC, or HAP, so CAM is not applicable.

(§64.2, 40 CFR 64)

Recordkeeping and Reporting Requirements

- Records of the type, quantity, and VOC content, expressed in both pounds per gallon (lb/gal) and percent by weight (%), of each cement or spray used in this process each month shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records summarizing the monthly and twelve (12) month rolling total of VOC emissions, expressed in both pounds (lb) and tons, from the 12 x 6 Tread Line and the Two (2) Plummer 8900 Green Tire Sprayers shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Monthly and updated twelve (12) month VOC emissions records shall be compiled no later than the fifteenth (15th) day of the month following each monthly reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- During any month, twelve (12) month period, or other compliance period during which there is an exceedance of the VOC emission limit, the Department shall be notified in writing within ten (10) working days of determining the exceedance. The notification shall include the following:
 - Dates covered during the reporting period;
 - Amount of VOC containing materials used during the reporting period;
 - Amount of VOC emitted during the reporting period;
 - Description of the cause of the exceedance; and
 - Description of any corrective action taken.

(§60.546(f), 40 CFR 60 Subpart BBB)

- A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through June 30th</i>	<i>August 29th</i>
<i>July 1st through December 31st</i>	<i>March 1st</i>

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

- The semi-annual monitoring report shall include the following information:
 - Calendar dates covered in the reporting period;
 - Type and quantity (in gallons) of each VOC containing material used during the reporting period;
 - VOC content of each material used (in both lb/gal and percent by weight);
 - Calculated amount of VOC emitted during the reporting period;
 - Calculated amount of VOC emitted during the previous twelve (12) month period;
 - Total quantity of treads cemented on each tread end cementing operation for each month;
 - The grams of VOC discharged per tire (g/tire) cemented for each tread end cementing operation for each month.

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

- Records of Method 311 of 40 CFR Part 60 Appendix A, or approved alternative method, test results indicating the mass percent of each HAP for each cement and solvent as purchased shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A list of each cement and solvent as purchased and the manufacturer or supplier of each shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A Subpart XXXX annual compliance report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through December 31st</i>	<i>March 1st</i>

(§63.6010(f), 40 CFR 63 Subpart XXXX)

- Each Subpart XXXX annual compliance report shall include the following:
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;

- For each annual reporting period during which the source uses a cement or solvent that, as purchased, was not included in the list submitted with the Notification of Compliance Status in 63.6009(g), an updated list of all cements and solvents used, as purchased, at the affected source, and a statement certifying that each cement and solvent, as purchased, that was used at the affected source during the reporting period met the HAP constituent limits in Table 1 to Subpart XXXX;
- If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the duration and cause of each deviation;
 - A description of any corrective action initiated and completed.

(§63.6010(c)-(d), 40 CFR 63 Subpart XXXX)

Tire Building and Curing

Description

The facility includes the following operations:

- Four (4) Green Tire Spraying Machines
 - Three (3) 8900 Plummer Spray Machines
 - One (1) Ilmberger Spray Machine
- 168 Curing Presses
- Specially Formulated Rubber (SFR) Rubber Compound Curing

Eight of these curing presses were added since the previous permit renewal. The facility received a letter of non-applicability for these presses on July 20, 2015. No increase in throughput was requested.

Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, *“Major Source Operating Permits”*.
- The green tire sprayers are subject to ADEM Admin. Code r. 335-3-6-.17, *“Manufacture of Pneumatic Rubber Tires”*. As stated in 335-3-6-.17(2)(a), (b), and (c), this rule applies to VOC emissions from undertread cementing, tread-end cementing, and green tire spraying
- Plummer 8900 Green Tire Sprayers No. 1 and No. 2 have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04. *“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”*.
- The Curing Presses have enforceable limits in place in order to comply with the applicable provisions of ADEM Admin. Code r. 335-3-14-.04. *“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”*.
- Per 40 CFR §60.540(a), the green tire sprayers are subject to the applicable provisions of 40 CFR 60 Subpart BBB, *“Standards of Performance for the Rubber Tire Manufacturing Industry”*.
- Per 40 CFR §63.5982(b)(1), the green tire sprayers are subject to the applicable provisions of 40 CFR 63 Subpart XXXX, *“National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing”*.
- Per 40 CFR §63.6013, the green tire sprayers are subject to the applicable provisions of 40 CFR 63 Subpart A, *“General Provisions”* as listed in Table 17 of 40 CFR 63 Subpart XXXX.

Emissions Standards

Volatile Organic Compounds (VOC):

- The VOC content of water-based sprays used by the Green Tire Sprayers shall not exceed 1.2 grams (0.0026 lb) of VOC per tire sprayed with an inside green tire spray for each month.

(§60.542(a)(5)(i), 40 CFR 60 Subpart BBB)

- The facility previously had a VOC emission limit that any sprays used by the Green Tire Sprayers shall not exceed 1.0% by weight. The facility recently requested to change that limit to 9.3 grams (0.021 lb) of VOC per tire sprayed with an outside green tire spray for each month for water-based sprays.

(§60.542(a)(5)(ii), 40 CFR 60 Subpart BBB)

- Total VOC emissions from green tire spraying shall not exceed an average of 76 grams per green tire, as determined on a monthly basis. This is satisfied by the above-mentioned limit of 9.3 grams of VOC per tire for each month.

(ADEM Admin. Code r. 335-3-6-.17(3)(d))

- Combined VOC emissions from the 12x6 Tread Line and Plummer Green Tire Sprayers No. 1 and 2 shall not exceed 39.0 tons in any consecutive twelve (12) month period.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- VOC emissions associated with the curing of Specially Formulated Rubber (SFR) shall not exceed 28.46 tons per month.

(ADEM Admin. Code r. 335-3-14-.04, BACT)

- Rubber throughput in the curing process shall not exceed 1,522,800 pounds per day.

(ADEM Admin. Code r. 335-3-14-.04, BACT)

Hazardous Air Pollutants (HAP):

- Goodyear has chosen the HAP constituent option to comply with emissions limits for tire production affected sources. Listed HAP emissions shall not exceed 1,000 grams of HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source. Non-listed HAP emissions shall not exceed 10,000 grams of HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.

(§63.5984, §63.5985(a), 40 CFR 63 Subpart XXXX, Table 1)

Expected Emissions

Emissions were based on RMA emissions factors and materials balance.

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)
C-1, C-2	VOC			21.41	93.78
EF 1K-PL1 & 2	VOC		39.0	3.73	16.34
EF 1K-PL3	VOC			0.00	0.00
EF 1K-PL4	VOC		2.0	0.00	0.00

Emission Point	Pollutant	Allowable	Uncontrolled Emissions	
		(tons/month)	(lb/hr)	(TPY)
Curing (SFR)	Ethanol	28.46	77.97	341.52

Emission Point	Pollutant	Allowable Emissions	Uncontrolled Emissions	
		(g/Mg)	(lb/hr)	(TPY)
EF-1K-PL1, 2, 3, & 4	Listed HAP	1,000	0.00	0.00
	Non-Listed HAP	10,000		
C-1, C-2	Listed HAP	1,000	5.05	22.10
	Non-Listed HAP	10,000		

Compliance and Performance Test Methods and Procedures

- The methods outlined in §60.543(d) shall be used to demonstrate compliance with all applicable VOC emission limits for green tire spraying operations using water-based sprays containing greater than or equal to 1.0 percent VOC (by weight).

(§60.543(d), 40 CFR 60 Subpart BBB)

- Formulation data or the results of Method 24 analyses for the water based sprays containing less than 1.0 percent VOC (by weight) shall be submitted to the Department annually, provided that the formula has not changed during the previous twelve (12) months.

(§60.543(b)(4), 40 CFR 60 Subpart BBB)

- If testing is required, VOC emissions shall be determined in accordance with Method 25 of 40 CFR 60 Appendix A.

(§60.547(a)(2), 40 CFR 60 Subpart BBB)

- Method 311 of 40 CFR 63 Appendix A, supplier formulation data, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(a), 40 CFR 63 Subpart XXXX)

- In order to demonstrate compliance with the applicable emission limits for tire production affected sources using the compliance alternative described in §63.5985(a) (purchase alternative), Method 311 40 CFR 63 Appendix A, supplier formulation data, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(b)(1), 40 CFR 63 Subpart XXXX)

- Other reasonable means include, but are not limited to: Safety Data Sheets (SDS), certified product data sheets (CPDS); or manufacturer's hazardous air pollutant data sheets.

(§63.5994(a)(1), 40 CFR 63 Subpart XXXX)

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- Compliance with the VOC and HAP limits shall be based upon materials use and inventory records.

(ADEM Admin. Code r. 335-3-16-.05(c))

- The facility shall adhere to the following work practice standards:
 - Each curing press shall be inspected on at least an annual basis to ensure that the units are being maintained in such a manner as to minimize the emission of air contaminants.
 - Goodyear shall establish procedures to ensure that the tires cured in each press are the appropriate size.
 - The temperature of each press shall be monitored to ensure that the tires are cured at the appropriate temperature.

(ADEM Admin. Code r. 335-3-14-.04, BACT)

- None of the units uses a control device to meet an emissions limit. Therefore, CAM is not applicable.

Recordkeeping and Reporting Requirements

- Records of any inspections and maintenance activities performed on the curing presses shall be kept in a permanent form suitable for inspection and shall be made available to

the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records of the type, quantity, and VOC content, expressed in both pounds per gallon (lb/gal) and percent by weight (%), of each cement or spray used in the green tire spraying operations each month shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records summarizing the monthly and twelve (12) month rolling total of VOC emissions, expressed in both pounds (lb) and tons, from the 12 x 6 Tread Line and three (3) Plummer 8900 Green Tire Sprayers shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records summarizing the results of monthly compliance tests required under §60.543(b)(1) shall be maintained for at least five (5) years from the date of generation.

(§60.545(e), 40 CFR Subpart BBB & ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records summarizing the monthly VOC emissions associated with the curing of SFR, expressed in tons, shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Records documenting the curing area rubber throughput, expressed in pounds per day (lb/day), shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- Monthly and updated twelve (12) month VOC emissions records shall be compiled no later than the fifteenth (15th) day of the month following each monthly reporting period.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- During any month, twelve (12) month period, or other compliance period during which there is an exceedance of the VOC emission limit, the Department shall be notified in writing within ten (10) working days of determining the exceedance. The notification shall include the following:
 - Dates covered during the reporting period;
 - Amount of VOC containing materials used during the reporting period;
 - Amount of VOC emitted during the reporting period;
 - Description of the cause of the exceedance; and
 - Description of any corrective action taken.

(§60.546(f), 40 CFR 60 Subpart BBB)

- A semi-annual report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through June 30th</i>	<i>August 29th</i>
<i>July 1st through December 31st</i>	<i>March 1st</i>

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

- The semi-annual report shall contain the following information:
 - Dates covered during the reporting period;
 - Type and quantity (in gallons) of each VOC containing material used during the reporting period;
 - VOC content of each material used (in both lb/gal and % by weight);
 - Calculated amount of VOC emitted during the reporting period;
 - Calculated amount of VOC emitted during the previous twelve (12) month period;
 - Quantity of tires sprayed with an inside green tire spray;
 - Grams of VOC discharged per tire (g/tire) sprayed with inside green tire spray;
 - Calculated VOC emissions associated with the curing of SFR.

(§60.546(f), 40 CFR 60 Subpart BBB & ADEM Admin. Code r. 335-3-16-.05(c)(3))

- Records of Method 311 (40 CFR part 60, appendix A), or approved alternative method, test results indicating the mass percent of each HAP for each cement and solvent as purchased shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A list of each cement and solvent as purchased and the manufacturer or supplier of each shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A Subpart XXXX annual compliance report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through December 31st</i>	<i>March 1st</i>

(§63.6010(f), 40 CFR 63 Subpart XXXX)

- Each Subpart XXXX annual compliance report shall include the following:
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;
 - For each annual reporting period during which the source uses a cement or solvent that, as purchased, was not included in the list submitted with the Notification of Compliance Status in 63.6009(g), an updated list of all cements and solvents used, as purchased, at the affected source, and a statement certifying that each cement and solvent, as purchased, that was used at the affected source during the reporting period met the HAP constituent limits in Table 1 to Subpart XXXX;
 - If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the duration and cause of each deviation;
 - A description of any corrective action initiated and completed.

(§63.6010(c)-(d), 40 CFR 63 Subpart XXXX)

Final Finishing

Description

This facility contains the following processes:

- White Sidewall Grinding
 - Twelve (12) WSW Grinders with Two (2) Dust Collectors
- Blue Tire Spraying
- Force Grinding with Cyclones
 - Twenty-four (24) Force Grinders with Five (5) Dust Collectors
- Radial Run Out Grinding with Cyclone
 - Eight (8) Radial Run-out Grinders with Two (2) Dust Collectors

Air permits 307-0006-X026, X027, and X028 are included in this permit renewal.

Applicability

- These sources are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, *“Major Source Operating Permits”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.04(1), *“Control of Particulate Emissions for Process Industries - General”*.
- These sources are subject to ADEM Admin. Code r. 335-3-4-.01(1), *“Control of Particulate Emissions – Visible Emissions”*.
- These units are not subject to ADEM Admin. Code r. 335-3-6-.17, *“Manufacture of Pneumatic Rubber Tires”*. As stated in 335-3-6-.17(2)(a), (b), and (c), this rule only applies to VOC emissions from undertread cementing, tread-end cementing, and green tire spraying
- Several of these units have enforceable limits in place in order to prevent them from being subject to the provisions of ADEM Admin. Code r. 335-3-14-.04. *“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”*.
- Per 40 CFR §60.540(a), these units are not subject to the applicable provisions of 40 CFR 60 Subpart BBB, *“Standards of Performance for the Rubber Tire Manufacturing Industry”*. These units are not listed as affected sources.
- Per 40 CFR §63.5982(b)(1), the blue tire spraying operation is subject to the applicable provisions of 40 CFR 63 Subpart XXXX, *“National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing”*.

- Per 40 CFR §63.6013, the blue tire spraying operation is subject to the applicable provisions of 40 CFR 63 Subpart A, “*General Provisions*” as listed in Table 17 of 40 CFR 63 Subpart XXXX.

Emissions Standards

Opacity:

- Visible emissions (VE) shall not exceed twenty percent (20%) opacity, as determined by a six minute average. During one six (6) minute period in any sixty (60) minute period, a person may discharge into the atmosphere from any source of emission forty percent (40%) opacity.

(ADEM Admin. Code r. 335-3-4-.01(1)(a)(b))

Particulate Matter (PM):

- Particulate emissions shall not exceed that which is determined by the following equation for a Class I County:

$$E = 3.59P^{0.62} \quad \text{or} \quad E = 17.31P^{0.16}$$

(for $P < 30$ TPH) (for $P \geq 30$ TPH)

Where: E = emissions in lb/hr
 P = process weight in TPH

(ADEM Admin. Code r. 335-3-4-.04(1))

- PM emissions from the White Sidewall Grinding Operation shall not exceed a total of 0.46 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Force Grinder No. 16 and Radial Run Out Grinder No. 1 shall not exceed 1.66 lb/hr each.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Force Grinder No. 17, Force Grinder No. 18, Radial Run Out Grinder No. 2, and Radial Run Out Grinder No. 3 shall not exceed 0.85 lb/hr each.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Force Grinders Nos. 19-21 shall not exceed 0.10 lb/hr each.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Force Grinders Nos. 22-23 shall not exceed 0.156 lb/hr each.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Radial Run Out Grinder Cyclone No. 1 (RROGDC1) shall not exceed 1.66 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Radial Run Out Grinders Nos. 8-10 shall not exceed 0.60 lb/hr each.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- PM emissions from Radial Run Out Grinders Nos. 4-7 shall not exceed 0.20 lb/hr each.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

Volatile Organic Compounds (VOC):

- Combined VOC emissions from Force Grinders Nos. 19-22 shall not exceed a total of 0.25 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

- Combined VOC emissions from Radial Run Out Grinders Nos. 4-7 shall not exceed a total of 0.63 lb/hr.

(ADEM Admin. Code r. 335-3-14-.04) Anti-PSD

Hazardous Air Pollutants (HAP):

- Goodyear has chosen the HAP constituent option to comply with emissions limits for tire production affected sources. Emissions of HAP listed in Table 16 to Subpart XXXX of Part 63 shall not exceed 1,000 grams of HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source. Non-listed HAP emissions shall not exceed 10,000 grams of HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.

(§63.5984, §63.5985(a), 40 CFR 63 Subpart XXXX, Table 1)

Expected Emissions

Emissions are based on RMA emission factors and engineering estimates.

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions		Controlled Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)	(lb/hr)	(TPY)
WSWDC1, WSWDC2	PM	0.46	2.01	21.64	94.79	0.43	1.90
	VOC			0.34	1.51		
	HAP			0.03	0.11		
EF 1H-PM	VOC			0.31	1.36		
FG No. 1-24 (Total)	PM			77.12	337.80	1.54	6.76
	VOC			1.23	5.37		
	HAP			0.09	0.39		
FG No. 16	PM	1.66	7.27	3.35	14.69	0.07	0.29
	VOC			0.05	0.23		
	HAP			0.004	0.017		
FG No. 17	PM	0.85	3.72	3.35	14.69	0.07	0.29
	VOC			0.05	0.23		
	HAP			0.004	0.017		
FG No. 18	PM	0.85	3.72	3.35	14.69	0.07	0.29
	VOC			0.05	0.23		
	HAP			0.004	0.017		
FG No. 19	PM	0.10	0.44	3.35	14.69	0.07	0.29
	VOC	0.25 ¹	1.10	0.05	0.23		
	HAP			0.004	0.017		
FG No. 20	PM	0.10	0.44	3.35	14.69	0.07	0.29
	VOC	0.25 ¹	1.10	0.05	0.23		
	HAP			0.004	0.017		
FG No. 21	PM	0.10	0.44	3.35	14.69	0.07	0.29
	VOC	0.25 ¹	1.10	0.05	0.23		
	HAP			0.004	0.017		
FG No. 22	PM	0.156	0.670	3.35	14.69	0.07	0.29
	VOC	0.25 ¹	1.10	0.05	0.23		
	HAP			0.004	0.017		
FG No. 23	PM	0.156	0.670	3.35	14.69	0.07	0.29
	VOC			0.05	0.23		
	HAP			0.004	0.017		
FG No. 24	PM			0.00	0.00		
	VOC			0.00	0.00		
	HAP			0.00	0.00		
RROG No. 1	PM	1.66	7.27	9.94	43.52	0.20	0.87
	VOC			0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 2	PM	0.85	3.72	9.94	43.52	0.20	0.87
	VOC			0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 3	PM	0.85	3.72	9.94	43.52	0.20	0.87
	VOC			0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 4	PM	0.20	0.88	9.94	43.52	0.20	0.87
	VOC	0.63 ²	2.76	0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 5	PM	0.20	0.88	9.94	43.52	0.20	0.87
	VOC	0.63 ²	2.76	0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 6	PM	0.20	0.88	9.94	43.52	0.20	0.87
	VOC	0.63 ²	2.76	0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 7	PM	0.20	0.88	9.94	43.52	0.20	0.87
	VOC	0.63 ²	2.76	0.1575	0.69		
	HAP			0.01	0.05		
RROG No. 8	PM	0.60	2.63	9.94	43.52	0.20	0.87
	VOC			0.1575	0.69		
	HAP			0.01	0.05		

¹Combined VOC limit for FG Nos. 19-22

²Combined VOC limit for RROG Nos. 4-7

Emission Point	Pollutant	Allowable Emissions	Uncontrolled Potential Emissions	
		(g/Mg)	(lb/hr)	(TPY)
EF 1H-PM	Listed HAP	1,000	0.00	0.00
	Non-Listed HAP	10,000		

Compliance and Performance Test Methods and Procedures

- Method 311 of 40 CFR 63 Appendix A, supplier formulation data, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(a), 40 CFR 63 Subpart XXXX)

- In order to demonstrate compliance with the applicable emission limits for tire production affected sources using the compliance alternative described in §63.5985(a) (purchase alternative), Method 311 40 CFR 63 Appendix A, supplier formulation data, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(b)(1), 40 CFR 63 Subpart XXXX)

- Other reasonable means include, but are not limited to: Safety Data Sheets (SDS), certified product data sheets (CPDS); or manufacturer's hazardous air pollutant data sheets.

(§63.5994(a)(1), 40 CFR 63 Subpart XXXX)

- If testing is required, particulate matter (PM) emissions shall be determined in accordance with Method 5 of 40 CFR 60, Appendix A.

(ADEM Admin. Code r. 335-3-1-.05)

- Visible emissions observations (VEO) shall be conducted in accordance with Method 9 of 40 CFR 60, Appendix A.

(ADEM Admin. Code r. 335-3-1-.05)

- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25 of 40 CFR 60, Appendix A.

(ADEM Admin. Code r. 335-3-1-.05)

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- Compliance with the VOC and HAP limits shall be based upon materials use and inventory records.

(ADEM Admin. Code r. 335-3-16-.05(c))

- An observation of instantaneous visible emissions from each dust collector cyclone associated with these units shall be accomplished weekly while in operation by an individual certified to determine opacity.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- If the observed instantaneous opacity from any unit is greater than ten (10%) percent, a series of fifteen (15) second visible emissions observation shall be conducted within thirty (30) minutes of the observation in accordance with 40 CFR 60 Appendix A, Method 9 for a minimum of twelve (12) consecutive minutes.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- If the six (6) minute average opacity during any Method 9 visible emission observation exceeds ten (10%) percent, corrective action shall be initiated within two (2) hours.

(ADEM Admin. Code r. 335-3-16-.05(c)(1))

- None of the units have the potential to emit a criteria pollutant in excess of 100 TPY. Therefore, CAM is not applicable.

Recordkeeping and Reporting Requirements

- Records of Method 311 of 40 CFR Part 60 Appendix A, or approved alternative method, test results indicating the mass percent of each HAP for each cement and solvent as purchased shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A list of each cement and solvent as purchased and the manufacturer or supplier of each shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A Subpart XXXX annual compliance report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through December 31st</i>	<i>March 1st</i>

(§63.6010(f), 40 CFR 63 Subpart XXXX)

- Each Subpart XXXX annual compliance report shall include the following:
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;
 - For each annual reporting period during which the source uses a cement or solvent that, as purchased, was not included in the list submitted with the Notification of Compliance Status in 63.6009(g), an updated list of all cements and solvents used, as purchased, at the affected source, and a statement certifying that each cement and solvent, as purchased, that was used at the affected source during the reporting period met the HAP constituent limits in Table 1 to Subpart XXXX;
 - If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the duration and cause of each deviation;
 - A description of any corrective action initiated and completed.

(§63.6010(c)-(d), 40 CFR 63 Subpart XXXX)

- Records of the observation date, observation time, emission point designation, name of the observer, expiration date of observer's certification, observed opacity, and any corrective actions taken during each visible emissions observation shall be kept in a permanent form suitable for inspection. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- If a visible emissions observation utilizing Method 9 is required, the results shall be documented using the ADEM visible emissions observation report form. These records shall be maintained for a period of at least five (5) years from the date of generation and shall be made available to the permitting authority upon request.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through June 30th</i>	<i>August 29th</i>
<i>July 1st through December 31st</i>	<i>March 1st</i>

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

- The semi-annual monitoring report shall include the following information:
 - Calendar dates covered in the reporting period;
 - A detailed description of every instance in which six (6) minute average visible emissions greater than ten (10%) percent were observed, to include the date, time, cause of the visible emissions, and the corrective action taken.
 - A copy of every ADEM visible emissions observation form generated during the reporting period.
 - A statement of certification of truth, accuracy, and completeness as described in General Permit Proviso No. 9;
 - Signature of the responsible official as required by General Permit Proviso No. 9.

(ADEM Admin. Code r. 335-3-16-.05(c)(3))

Miscellaneous Solvent Use

Description

Rubber solvents are used throughout the facility for cleaning production parts.

Applicability

- This process subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, “*Major Source Operating Permits*”.
- This process is not subject to ADEM Admin. Code r. 335-3-6-.17, “*Manufacture of Pneumatic Rubber Tires*”. As stated in 335-3-6-.17(2)(a), (b), and (c), this rule only applies to VOC emissions from undertread cementing, tread-end cementing, and green tire spraying.
- Per §60.540, this process is not subject to the applicable provisions of 40 CFR 60 Subpart BBB, “*Standards of Performance for the Rubber Tire Manufacturing Industry*”. This type of process is not listed as an affected source.
- Per §63.5982(b)(1), process equipment cleaning materials are subject to the applicable requirements of 40 CFR 63 Subpart XXXX, “*National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing*”.
- Per §63.6013, this process is subject to the applicable provisions of 40 CFR 63 Subpart A, “*General Provisions*” as listed in Table 17 of 40 CFR 63 Subpart XXXX.

Emissions Standards

Volatile Organic Compounds (VOC):

- This process has no applicable emission limits for VOC.

Hazardous Air Pollutants (HAP):

- Goodyear has chosen the HAP constituent option to comply with emissions limits for tire production affected sources. Listed HAP emissions shall not exceed 1,000 grams of HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source. Non-listed HAP emissions shall not exceed 10,000 grams of HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.

(§63.5984, §63.5985(a), 40 CFR 63 Subpart XXXX, Table 1)

Expected Emissions

Emissions are based on materials balance.

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions	
		(lb/hr)	(TPY)	(lb/hr)	(TPY)
Solvent Use	VOC	N/A	N/A	1.83	8.02

Emission Point	Pollutant	Allowable Emissions		Uncontrolled Emissions	
		(g/Mg)	(TPY)	(lb/hr)	(TPY)
Solvent Use	Listed HAP	1,000	N/A	0.00	0.00
	Non-Listed HAP	10,000	N/A		

Compliance and Performance Test Methods and Procedures

- Method 311 of 40 CFR 63 Appendix A, supplier formulation data, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(a), 40 CFR 63 Subpart XXXX)

- In order to demonstrate compliance with the applicable emission limits for tire production affected sources using the compliance alternative described in §63.5985(a) (purchase alternative), Method 311 40 CFR 63 Appendix A, supplier formulation data, or any other reasonable means shall be used in the determination of HAP content in any cement or solvent used in this process.

(§63.5994(b)(1), 40 CFR 63 Subpart XXXX)

- Other reasonable means include, but are not limited to: Safety Data Sheets (SDS), certified product data sheets (CPDS); or manufacturer's hazardous air pollutant data sheets.

(§63.5994(a)(1), 40 CFR 63 Subpart XXXX)

- If testing is required, volatile organic compound (VOC) emissions shall be determined in accordance with Method 25 of 40 CFR 60, Appendix A.

(ADEM Admin. Code r. 335-3-1-.05)

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- Compliance with the HAP limits shall be based upon materials use and inventory records.

(ADEM Admin. Code r. 335-3-16-.05(c))

- This process does not emit criteria pollutants in excess of 100 TPY. Therefore, CAM is not applicable.

Recordkeeping and Reporting Requirements

- Records of the type, quantity, and VOC content, expressed in both pounds per gallon (lb/gal) and percent by weight (%), of each solvent used in this process each month shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(ADEM Admin. Code r. 335-3-16-.05(c)(2))

- A list of each cement and solvent as purchased and the manufacturer or supplier of each shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- Records of Method 311 (40 CFR 60 Appendix A), or approved alternative method, test results indicating the mass percent of each HAP for each cement and solvent as purchased shall be kept in a permanent form suitable for inspection and shall be made available to the permitting authority upon request. These records shall be maintained for at least five (5) years from the date of generation.

(40 CFR 63 Subpart XXXX, Table 9)

- A Subpart XXXX annual compliance report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>January 1st through December 31st</i>	<i>March 1st</i>

(§63.6010(f), 40 CFR 63 Subpart XXXX)

- Each Subpart XXXX annual compliance report shall include the following:
 - Facility name and address;
 - Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report as outlined in General Proviso No. 9;
 - Date of report and beginning and ending dates of the reporting period;
 - If no deviations occurred during the reporting period, a statement that there were no deviations from the emission limitations;
 - The emission limit option and compliance alternative method chosen;

- For each annual reporting period during which the source uses a cement or solvent that, as purchased, was not included in the list submitted with the Notification of Compliance Status in 63.6009(g), an updated list of all cements and solvents used, as purchased, at the affected source, and a statement certifying that each cement and solvent, as purchased, that was used at the affected source during the reporting period met the HAP constituent limits in Table 1 to Subpart XXXX;
- If deviations occurred during the reporting period, the report must contain the following information:
 - Total operating time of each affected source during the reporting period;
 - A statement of the cause of each deviation;
 - A description of any corrective action initiated and completed.

(§63.6010(c)-(d), 40 CFR 63 Subpart XXXX)

Emergency Engines

Description

The facility contains the following emergency engines:

- One (1) 331 HP Compression Ignition Emergency Generator (Diesel)
 - Ordered and manufactured in 2007
- One (1) 157 HP Compression Ignition Emergency Fire Pump (Diesel)
 - Estimated installation in 1977
- One (1) 92 HP Spark Ignition Emergency Generator (Natural Gas)
 - Estimated installation in 1970

Applicability

- These units are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, *“Major Source Operating Permits”*.

(ADEM Admin. Code r. 335-3-16-.03)

- These units are subject to ADEM Admin. Code r. 335-3-4-.01(1), *“Control of Particulate Emissions – Visible Emissions”*.

(ADEM Admin. Code r. 335-3-4-.01(1))

- These units are stationary RICE at a major source for HAP and are subject to the applicable requirements of 40 CFR 63 Subpart ZZZZ, *“National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines”*.

(§63.6585, 40 CFR 63 Subpart ZZZZ)

- The 331 HP CI emergency generator was constructed after July 11, 2005, and manufactured after April 1, 2006. Thus, it is subject to the applicable requirements of 40 CFR 60 Subpart IIII, “*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*”.

(§60.4200(a)(2)(i), 40 CFR 60 Subpart IIII)

- The 157 HP CI emergency fire pump engine was constructed before July 11, 2005 and therefore is not subject to the applicable requirements of 40 CFR 60 Subpart IIII, “*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*”.

(§60.4200(a), 40 CFR 60 Subpart IIII)

- The 92 HP SI emergency generator was manufactured before January 1, 2009, and therefore is not subject to the applicable requirements of 40 CFR 60 Subpart JJJJ, “*Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*”.

(§60.4230(a)(2)(ii), 40 CFR 60 Subpart JJJJ)

Emissions Standards

- The facility must operate and maintain these units according to the manufacturer’s emission related written instructions or develop its own plan to operate and maintain these units in a way consistent with good air pollution control practice to minimize emissions.

(§63.6625(e)(2), 40 CFR 63 Subpart ZZZZ)

- The facility must install non-resettable hour meters if they are not already installed.

(§63.6625(f), 40 CFR 63 Subpart ZZZZ)

- There is no time limit on the use of these units in emergency situations. The facility may operate these units for a maximum of 100 hours per calendar year each for approved maintenance checks and readiness testing. These units are allowed to operate for up to 50 hours per calendar year each in non-emergency situations, but this cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours for non-emergency situations is counted as part of the 100 hours of allowable use for maintenance and testing.

(§63.6640(f), 40 CFR 63 Subpart ZZZZ)

- The facility must comply with the requirements of 40 CFR 63 Subpart ZZZZ Table 2c for emergency stationary CI and SI RICE at a major source of HAP emissions. These requirements are:
 - Change oil and filter every 500 hours of operation or annually, whichever comes first.
 - Inspect air cleaner/spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
 - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(40 CFR 63 Subpart ZZZZ, Table 2c)

- During periods of startup, the facility must minimize the engines' time spent at idle and minimize the engines' startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(§63.6625(h), 40 CFR 63 Subpart ZZZZ)

- In order to extend the oil change requirement for CI engines in Table 2c, the facility has the option of utilizing an oil analysis program. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the facility is not required to change the oil. If any of the limits are exceeded, the facility must change the oil within 2 business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the facility must change the oil within 2 business days or before commencing operation, whichever is later.

(§63.6625(i), 40 CFR 63 Subpart ZZZZ)

- In order to extend the oil change requirement for SI engines in Table 2c, the facility has the option of utilizing an oil analysis program. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the facility is not required to change the oil. If any of the limits are exceeded, the facility must change the oil within 2 business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the facility must

change the oil within 2 business days or before commencing operation, whichever is later.

(§63.6625(j), 40 CFR 63 Subpart ZZZZ)

- The 331 HP CI emergency generator must comply with the emission standards for new nonroad CI engines in §60.4202. The permit application included an EPA Tier 3 Exhaust Emission Compliance Statement for this engine verifying that it meets these standards.

(§60.4205(b), 40 CFR 60 Subpart IIII)

Expected Emissions

Emissions are based on AP 42 emission factors.

Unit	Pollutant	Uncontrolled Emissions (lb/hr)	Uncontrolled Emissions (TPY)
331 HP CI Emergency Generator	NOx	10.32	44.94
	CO	2.21	9.68
	VOC	0.66	2.90
	PM	0.73	3.19
	SO2	0.68	2.97
	Formaldehyde	0.39	1.71
	Total HAP	0.01	0.393
157 HP CI Emergency Fire Pump	NOx	4.87	21.32
	CO	1.05	4.59
	VOC	0.31	1.38
	PM	0.35	1.51
	SO2	0.32	1.41
	Formaldehyde	0.19	0.81
	Total HAP	0.004	0.0186
92 HP SI Emergency Generator	NOx	4.87	21.32
	CO	1.05	4.59
	VOC	0.31	1.38
	PM	0.35	1.51
	SO2	0.32	1.41
	Formaldehyde	0.19	0.81
	Total HAP	0.004	0.0186

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

- As there are no pollutant-specific emission standards for these units, and the expected emissions are low, no periodic monitoring is deemed necessary. The monitoring required by 40 CFR 63 Subpart ZZZZ is deemed sufficient.

- These units do not emit criteria pollutants in excess of 100 TPY. Thus, CAM is not applicable.

Recordkeeping and Reporting Requirements

- The facility must keep records of the maintenance conducted on this unit in order to demonstrate that its operation and maintenance followed the facility's maintenance plan. Records must be kept in a suitable form for review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(§63.6655(e), 40 CFR 63 Subpart ZZZZ)

- The facility must keep records of the hours of operation of this unit that is recorded through the non-resettable hour meter. The facility must document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation. If the unit is used for emergency purposes, the facility must keep records of the notification of the emergency situation and the date, start time, and end time of engine operation for these purposes. Records must be kept in a suitable form for review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(§63.6655(f), 40 CFR 63 Subpart ZZZZ)

- If the facility chooses to utilize an oil analysis program to extend the oil change requirement of Table 2c, it must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engines. Records must be kept in a suitable form for review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(§63.6625(i), 40 CFR 63 Subpart ZZZZ)

- The recordkeeping and reporting requirements of 40 CFR 60 Subpart IIII are satisfied by the requirements of 40 CFR 63 Subpart ZZZZ.